

## **WHAT IS CLAIMED**

1. A system for providing electrophotographic latent images on a photoconductor element having a conductive stripe that is in contact with a photoconductor layer on one  
5 edge of the photoconductor element comprising:

a first corona charge device positioned to charge the photoconductor layer; and

a second corona charge device positioned to charge the conductive stripe with a charge that is opposite a charge provided by the first corona discharge device.

10 2. The system of claim 1 having an optical imaging system between the first corona charge device and the second charge device.

3. The system of claim 1 having a charge toning device between the first corona charge device and the second corona charge device.

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4. The system of claim 2 having a charge toning device between the first corona charge device and the second corona charge device.

5. The system of claim 1 wherein the photoconductor element comprises an  
20 endless belt or a drum.

6. The system of claim 2 wherein the photoconductor element comprises an endless belt or a drum.

25 7. The system of claim 3 wherein the photoconductor element comprises an endless belt or a drum.

8. The system of claim 4 wherein the photoconductor element comprises an  
30 endless belt or a drum.

9. A method of providing latent charge images on a photoconductor element having a photoconductive layer with a conductive stripe, the process comprising:

charging the photoconductive layer with a charge having a particular vector to form a uniform charge on the photoconductive layer; and

5 subsequently charging the conductive stripe with a charge having a vector that is opposite the vector of the charge on the photoconductive layer to lower the charge content in the photoconductive layer.

10 10. The method of claim 9 wherein a portion of the uniform charge is dissipated by exposure to radiation prior to the subsequent charging of the conductive stripe.

11. The method of claim 9 wherein the photoconductor layer is toned with an electrophotographic toner prior to the subsequent charging of the conductive stripe.

15 12. The method of claim 10 wherein the photoconductor layer is toned with an electrophotographic toner prior to the subsequent charging of the conductive stripe.

13. The system of claim 1 wherein the second corona charging device is positioned between 2-10 mm from the conductive strip of the photoreceptor.

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14. The method of claim 9 further comprising:

sensing the ground strip voltage by

measuring the surface potential of the ground strip at a point downstream of the second corona charging device to provide a signal,

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sending the signal to an error amplifier,

comparing the measured surface potential with a reference surface potential to provide a resulting comparison,

sending the resulting comparison to a high voltage amplifier,

30 sending a charge to the second corona charging device of sufficient potential based upon the resulting comparison to alter the sensed ground strip voltage in a correct vector,

and applying positive or negative ions to the ground strip to provide a potential close to zero volts.

15. The system of claim 1 wherein the second corona charging device does  
5 not include the use of a shield integral to a wire in the second corona discharge device.

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